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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,795	06/20/2003	Tadashi Kotani	NGB-14886	9681
40854 75	590 09/09/2004		EXAMINER	
RANKIN, HILL, PORTER & CLARK LLP 4080 ERIE STREET			BROWN, KHALED	
	Y, OH 44094-7836		ART UNIT	PAPER NUMBER
	,		2877	·
			DATE MAILED: 09/09/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

		<u> </u>	/
	Application No.	Applicant(s)	
	10/600,795	KOTANI, TADASHI	
Office Action Summary	Examiner	Art Unit	_
	Khaled Brown	2877	
The MAILING DATE of this communication Period for Reply	appears on the cover sheet w	vith the correspondence address	
A SHORTENED STATUTORY PERIOD FOR RITHE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication - If the period for reply specified above is less than thirty (30) days, for the period for reply is specified above, the maximum statutory properties of the period for reply within the set or extended period for reply will, by some and patent term adjustment. See 37 CFR 1.704(b).	ON. FR 1.136(a). In no event, however, may a n. a reply within the statutory minimum of th eriod will apply and will expire SIX (6) MO statute, cause the application to become a	reply be timely filed irty (30) days will be considered timely. INTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on	21 June 2004.		
,	This action is non-final.		
3) Since this application is in condition for all closed in accordance with the practice und	owance except for formal ma		
Disposition of Claims			
4) ☐ Claim(s) 1-8 is/are pending in the applicat 4a) Of the above claim(s) is/are with 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-6 is/are rejected. 7) ☐ Claim(s) 7 and 8 is/are objected to. 8) ☐ Claim(s) are subject to restriction a	ndrawn from consideration.		
Application Papers			
9) ☐ The specification is objected to by the Examination The drawing(s) filed on 11 September 2005/2016/2016/2016/2016/2016/2016/2016/2016	$\underline{3}$ is/are: a) $\boxed{\Delta}$ accepted or b) of the drawing(s) be held in abeyon prection is required if the drawing	ance. See 37 CFR 1.85(a). g(s) is objected to. See 37 CFR 1.121(d).	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for for a) All b) Some * c) None of: 1. Certified copies of the priority docur 2. Certified copies of the priority docur 3. Copies of the certified copies of the application from the International But * See the attached detailed Office action for a	ments have been received. ments have been received in priority documents have bee ureau (PCT Rule 17.2(a)).	Application No n received in this National Stage	
Attachment(s)			
 Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) 	3) Paper No	Summary (PTO-413) b(s)/Mail Date	
Information Disclosure Statement(s) (PTO-1449 or PTO/S Paper No(s)/Mail Date		Informal Patent Application (PTO-152)	

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DETAILED ACTION

Specification

1. The amendment filed 6-7-04 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: page 2, lines 1-8, of applicants Amendment To The Specification, "....which can restore the interference state to or above a threshold where fine adjustment of an interferometer can again be effective..." Additionally, the applicant has not included in applicants Remarks filed 6-7-04 the certification that --No New Matter Has Been Added—concerning the proposed amendments to the specification.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

- 2. The following is a quotation of the first paragraph of 35 U.S.C. 112:
 - The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.
- 3. Claims 1-4 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. On pages 5 and 6 of applicants Amendment To

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The Claims, the added limitations of "and fine adjustment of the interferometer is effective" is new matter.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1,4,5 and 6 are still rejected under 35 U.S.C. 103(a) as being unpatentable over Wijntjes et al (US 4711573).

Re clms 1,5: Wijntjes et al discloses a method of adjusting a fixed mirror of a double-beam interferometer including a control interferometer, comprising: detecting a laser interference light beam from the control interferometer (Col 4 lines 39-44); and adjusting an angle of the fixed mirror with respect to a laser light beam axis so that the intensity of interference of the laser light beams becomes maximum or the laser light beams become in an arbitrary interference state (Col 5 lines 49-54). However, Wijntjes et al does not expressly state that during the initial adjustment the laser light beams do not interfere at all. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to begin the adjustment of the fixed mirror at a state where laser light beams do not interfere at all because during the initial set up of an

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interferometer the mirrors are not in critical alignment and without this critical there will not be any initial interference of the laser light beams.

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Re clm 6: initial amplitude is zero (during initial set up of the interferometer mirrors)

Re clm 4: Wijntjes et al discloses an interferometric spectrophotometer comprising: a control interferometer having fixed mirror; a photo detector for detecting a laser interference light beam from the control interferometer; and an adjusting mechanism for adjusting an angle of the fixed mirror with respect to a laser light beam axis so that the intensity of interference of the laser light beams becomes maximum or the laser light beams become in an arbitrary interference state (Col 5 lines 49-54). However, Wijntjes et al does not expressly state that the adjustment mechanism adjusts the fixed mirror from a state where laser light beams do not interfere at all. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to begin the adjustment of the fixed mirror at a state where laser light beams do not interfere at all because during the initial set up of an interferometer the mirrors are not in critical alignment and without this critical alignment there will not be any initial interference of the laser light beams.

Allowable Subject Matter

5. Claims 7 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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6. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record fails to disclose or suggest the limitation of "moving the posture of the fixed mirror to points on a circle around the set point where the amplitude became larger than the threshold value as a center" all in conjunction with the rest of the claimed subject matter.

7. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

Response to Arguments

- 8. Applicant's arguments filed 6-7-04 have been fully considered but they are not persuasive. The applicant argues in regard to claim 1-4 that Wijntjes et al only teaches a method of fine adjustment and that rough adjustment is not taught using a method where an interference light beam is detected from the control interferometer (Remarks p. 10 lines 17-23).
- 9. In response to applicant's arguments regarding claim 1 and its dependent claims, the recitation "Rough Adjustment" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand

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alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

10. Additionally even if the limitation "Rough Adjustment" were to be given patentable weight, Wijntjes et al would still meet this additional limitation. The initial setup of the apparatus of Wijntjes et al is a Rough Adjustment and the dynamic function of the method disclosed in Wijntjes et al can be considered a Fine Adjustment.

Conclusion

- 11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Thompson et al 4480914, Buijs et al 4345838, Curbelo et al 5166749, Schindler 3809481, Westerberg 4385835 and Ge 6707559.
- 12. Note: No IDS has been filed with the Amendment entered 6-7-04.
- 13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khaled Brown whose telephone number is 571-272-2411. The examiner can normally be reached on M-F 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J Toatley Jr. can be reached on 571-272-2800 Ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KB September 6, 2004

GREGORY TOATLEY JR.

PRIMARY EXAMINER SPEZ877